AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1. (Currently amended) A method of authenticating an attached function for the purpose of permitting access by the attached function to network services associated with a network infrastructure including a network entry device and another network infrastructure device including an IEEE 802.1X Port Access Entity (PAE), the method comprising the steps of:

a. configuring the network entry device to recognize authentication signals received from an attached function, and not to operate as a PAE authenticator;

b. receiving at the network entry device from the attached function one or more signal packets ~~including authentication information~~; ~~and~~

c. holding or discarding any non-authenticating signals of the one or more signal packets;

~~b~~d. ~~transferring~~ forwarding by the network entry device only ~~the one or more~~ signal packets including authentication information to the another network infrastructure device for authentication ~~through a relay function to the IEEE 802.1X PAE~~; and

e. forwarding non-authenticating signals from the attached function through the network entry device only after authentication of the attached function by the PAE.

2. (Currently amended) The method as claimed in Claim 1 further comprising the step of making the forwarding of non-authenticating signals ~~transfer of the one or more signal packets through the relay function~~ compatible with IEEE Standard 802.1D or IEEE Standard 802.1Q.

3. (Original) The method as claimed in Claim 2 further comprising the step of examining the signal packets for a reserved Media Access Control address and/or an Ethernet type.

4. (Original) The method as claimed in Claim 1 wherein the authentication information includes an Extensible Authentication Protocol message.

5. (Currently amended) The method as claimed in Claim 1 wherein the network infrastructure includes a plurality of network entry devices, each configured to recognize authentication signals to be received from an attached function, and not to operate as a PAE authenticator, the method further comprising the step of maintaining state for one or more sessions associated with ~~one or more~~ the plurality of network entry devices.

6. (Currently amended) The method as claimed in Claim 5 wherein the step of maintaining state is performed by a tracking function of one or more devices of the network infrastructure devices including the plurality of network entry devices and the another network infrastructure device.

7. (Original) The method as claimed in Claim 1 further comprising the steps of recognizing through a tracking function of the network infrastructure authentication success messages and enabling a change of state associated with a forwarding function of the network entry device.

8. (Original) The method as claimed in Claim 7 wherein the tracking function forms part of the network entry device.

9. (Currently amended) A system to authenticate an attached function for the purpose of permitting access by the attached function to network services associated with a network infrastructure, the system comprising:

a. ~~the network infrastructure including~~ a network entry device including ~~having~~ ~~an uncontrolled input port, and a central forwarding device including an IEEE 802.1X Port Access Entity (PAE), the system comprising a relay function of the network entry device, the~~ relay function configured to receive and forward only authentication signals from the ~~uncontrolled input port of the network entry device~~ attached function and to hold or discard any non-authenticating signals received until after the attached function has been authenticated, wherein the network entry device is not an authenticator; and

b. another network infrastructure device including an IEEE 802.1X Port Access Entity (PAE) configured to receive from the network entry device the forwarded ~~and forward the~~ authentication signals ~~to the PAE~~ for authentication of the

attached function before permitting the network entry device, through the relay function, to forward non-authenticating signals from the attached function ~~access of the attached function to the network services through the network entry device~~.

10. (Currently amended) The system as claimed in Claim 9 wherein the relay function forwards the non-authenticating ~~authentication~~ signals in a manner compatible with IEEE Standard 802.1D or IEEE Standard 802.1Q.

11. (Original) The system as claimed in Claim 9 wherein the relay function is configured to recognize authentication signals for a reserved Media Access Control address and/or an Ethernet type.

12. CANCELLED.

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14. (Currently amended) The system as claimed in Claim 9 further comprising a tracking function ~~of the network infrastructure~~ to monitor authentication ~~authenticate success~~ messages and to enable a change of state associated with a forwarding function of the network entry device.

15. (New) A method of authenticating an attached function for the purpose of permitting access by the attached function to network services associated with a network infrastructure including a network entry device and another network infrastructure device, the another network infrastructure device including attached function authentication functionality, the method comprising the steps of:

a. configuring the network entry device to recognize authentication signals received from an attached function, and not to operate as an authentication device;

b. forwarding by the network entry device only signal packets including authentication information to the another network infrastructure device for authentication; and

c. forwarding non-authenticating signals from the attached function through the network entry device only after authentication of the attached function by the another network infrastructure device.

16. (New) The method as claimed in Claim 15 further comprising the step of forcing re-authentication of the attached function upon loss of signal packet exchange with the network entry device.

17. (New) The method as claimed in Claim 15 wherein the authentication functionality of the another network infrastructure device is an IEEE 801.1X Port Access Entity.

18. (New) The method as claimed in Claim 15 further comprising the steps of recognizing through a tracking function of the network infrastructure authentication success messages and enabling a change of state associated with a forwarding function of the network entry device.

19. (New) The method as claimed in Claim 15 further comprising the step of transferring one or more signal packets through the network entry device in a format compatible with IEEE Standard 802.1D or IEEE Standard 802.1Q.

20. (New) The method as claimed in Claim 18 wherein the authentication information includes an Extensible Authentication Protocol message.